

and that complies with all requirements imposed by that program, is a “VICP participant” with respect to that product.

(b) *Testing.* A VICP participant that tests a basic model pursuant to this subpart must use statistically valid and accurate methods to arrive at the efficiency rating of such basic model.

(c) *Alternative efficiency determination methods.* Before using an AEDM to determine the efficiency of a basic model pursuant to this subpart, a VICP participant must apply the AEDM to one or more basic models that have been tested in accordance with §§431.173(b) and 431.174(b) of this subpart, and the predicted efficiency calculated for each such basic model from application of the AEDM must be within 5 percent of the efficiency determined from testing that basic model. In addition, the predicted efficiency(ies) calculated for the tested basic model(s) must on average be within one percent of the efficiency(ies) determined from testing such basic model(s).

(d) *Limitation on use of an Alternative Efficiency Determination Method.* A manufacturer may not use an AEDM to overrate the efficiency of a basic model.

§431.175 Additional requirements applicable to non-Voluntary Independent Certification Program participants.

If you are a manufacturer that is not a VICP participant with respect to a particular type of commercial HVAC and WH product, you must meet the following requirements as to that product.

(a) *Testing.* You must perform any testing of a basic model pursuant to this subpart under the supervision of independent testing personnel, or have such testing performed at an independent laboratory. In addition, you must test a sufficient number of units of the basic model, and the efficiency rating of the basic model must be determined, such that,

(1) Any represented value of energy efficiency is no greater than the lower of the mean of the sample, or the lower 95 percent confidence limit of the true mean divided by 0.95, and

(2) Any represented value of energy usage is no less than the greater of the mean of the sample, or the upper 95 percent confidence limit of the true mean divided by 1.05.

(b) *Alternative efficiency determination methods.* Before using an AEDM to determine the efficiency of a basic model pursuant to this subpart, you must first:

(1) Apply the AEDM to three or more basic models that have been tested in accordance with §§431.173(b) and 431.175(a) of this subpart. The predicted efficiency calculated for each such basic model from application of the AEDM must be within three percent of the efficiency determined from testing that basic model, and the predicted efficiencies calculated for the tested basic models must on average be within one percent of the efficiencies determined from testing such basic models; and

(2) Obtain from the Department approval of the AEDM. The Department will provide such approval after receiving from you documentation which establishes that the AEDM satisfies the requirements of §§431.173(c)(1) and 431.175(b)(1) of this subpart.

(3) *Validation of an AEDM.* To use an AEDM under this subpart, the manufacturer must validate it as follows:

(i) Using the AEDM, the manufacturer must calculate the efficiency of three or more of its basic models. They must be the manufacturer’s highest-selling basic models to which the AEDM could apply.

(ii) The manufacturer must test each of these basic models in accordance with §431.173(b) of this subpart, and either §§431.174(b) or 431.175(a), whichever is applicable.

(iii) The predicted efficiency calculated for each such basic model from application of the AEDM must be within three percent of the efficiency determined from testing that basic model, and the average of the predicted efficiencies calculated for the tested basic models must be within one percent of the average of the efficiencies determined from testing these basic models.

(4) *Limitation on use of an AEDM.* A manufacturer may not use an AEDM to overrate the efficiency of a basic model.